

REMARKS

The Amendments

The specification is amended to update the parent application status, as requested in the Office Action.

Claim 6 is amended to incorporate the substance of claim 7 therein, which is accordingly canceled. New dependent claims are also added which are supported by the original disclosure, for example, see; page 7, line 31, to page 8, line 10; page 23, lines 21-31; page 8, line 20, to page 9, line 7; page 14, lines 6-38; page 19, line 27, to page 20, line 33; page 6, lines 25-34; page 7, lines 22-23; page 23, lines 7-20.

To the extent that the amendments avoid the prior art or for other reasons related to patentability, competitors are warned that the amendments are not intended to and do not limit the scope of equivalents which may be asserted on subject matter outside the literal scope of any patented claims but not anticipated or rendered obvious by the prior art or otherwise unpatentable to applicants. Applicants reserve the right to file one or more continuing and/or divisional applications directed to any subject matter disclosed in the application which has been canceled by any of the above amendments.

The Rejections under 35 U.S.C. § 103

The rejections of claims 6-9 under 35 U.S.C. § 103, as being obvious over Boneberger (U.S. Patent No. 5,894,002), alone, or in view of Gibson (U.S. Patent No. 5,093,067) or Hayashi (U.S. Patent No. 4,995,799) are respectfully traversed.

The substance of claim 7 is now incorporated into claim 6. Thus, the rejection based on Boneberger alone or Boneberger in view of only Hayashi are believed rendered moot.

The arguments below will, thus, primarily address the combined teachings of Boneberger with Gibson and that combination in view of Hayashi.

Boneberger is directed to a method and apparatus for producing contacting lenses. The apparatus includes two mold halves which enclose a mold cavity and the object of the invention is to allow predictability as to which mold half the contact lens will adhere when the mold halves are separated; see, e.g., paragraph bridging cols. 1-2. As the material for the mold, Boneberger discloses polypropylene, polystyrene, polymethyl methacrylate or polycarbonate; see, e.g., col. 5, lines 38-50. In Figure 12, discussed at col. 6, lines 20-36, it is disclosed that the female (bottom) half of the mold is transparent to light and the contact lens material can be polymerized by exposure to light through this bottom half of the mold.

As recognized in the Office Action, Boneberger fails to teach a mother mold made from a photo-curable liquid silicone rubber composition – which is now recited in independent claim 6. There is no suggestion at all from Boneberger to provide a mother mold “formed from a transparent cured product of a photo-curable liquid silicone rubber composition.” In addition to the distinction in the material from which the mother mold is made, there is an additional distinction in the transparency aspect of the mold. Boneberger only suggests that the bottom half (or female half) of the mold be transparent. The clear implication from this teaching is that the top (or male) half of the mold in Boneberger is not transparent. Accordingly, applicants urge that – in addition to being of a distinct material – the mold of Boneberger is not a mother mold “formed from a transparent cured product” because only half of it is taught or suggested to be transparent. If the “formed from” term of the instant claims is not considered to convey this distinction, reference is made to new claim 16 reciting that the “mother mold consists of the transparent cured product.”

The rejection made in combination with Gibson alleges that it would have been obvious to one of ordinary skill in the art to make the mold of Boneberger with the materials of Gibson and that such combination suggests the claimed invention.

Applicants urge that such combination would not have been obvious to one of ordinary skill in the art and that, regardless, the combination would not result in or suggest the claimed apparatus.

Gibson relates to forming thin-walled fabric-reinforced rolling elastomer diaphragms. The diaphragms are thin and flexible materials which incorporate a fabric within the elastomer; see, e.g., col. 1, lines 9-19. Although Gibson discloses that the elastomer may be a silicone rubber, there is no suggestion therefrom that a silicone rubber material would be useful as a material for making the Boneberger mold halves. Although made by molding, there is nothing to suggest the diaphragms made by Gibson would be useful themselves for making a mold. To the contrary, one of ordinary skill in the art would not expect that a thin and flexible material, such as prepared in Gibson, would not be useful as a mold. A mold must be somewhat rigid so as to retain its shape to be useful as a mold. Thus, there is no suggestion for one of ordinary skill in the art to use the silicone rubber material taught by Gibson as a material for the mold halves of Boneberger.

Further, even if the Gibson material was used to provide the mold halves of Boneberger, the claimed invention would not result or be suggested. First, the silicone rubber of Gibson is not a photo-cured resin. The use of injection molding and the disclosure at col. 7, lines 7-19, makes clear that Gibson contemplates only heat-cured elastomers. Second, it is clear that the Gibson materials are not transparent. This is clear because the diaphragm materials incorporate a substantial fabric therein which would not be transparent and because the objectives of the Gibson invention do not require or desire that the diaphragms be

transparent. Finally, as discussed above, only one of the mold halves of Boneberger is suggested to be transparent and there would be no motivation from Gibson to make both halves of the mold transparent.

Hayashi is relied upon in the Office Action for its teachings regarding defoaming of a polymer. In view of the distinctions above, even if Hayashi was applied to the other prior art teachings, the claimed invention would not be suggested. Hayashi teaches nothing regarding a "mother mold being formed from a transparent cured product of a photo-curable liquid silicone rubber composition."

According to the invention, when a mother mold is formed of a photo-curable liquid silicone rubber composition and a photo-curable liquid resin is used as the liquid resin to be filled in the mold cavity to produce an article, the photo-curable liquid resin filled in the mold cavity can be photo-cured by performing light irradiation from outside the mother mold. That is, the replica can quickly be produced through a simple operation. The invention is advantageous, for example, in that the time required to form the mother mold and hence, the replica is significantly reduced, as compared with conventional addition heat vulcanizable or room temperature vulcanizable silicone rubber compositions. Also, because the mother mold is formed of a photo-curable liquid silicone rubber composition, there is no problem with or deterioration of the mold when it is exposed to UV light to cure the composition in the cavity.

Neither the claimed apparatus nor its advantages are suggested by the combined teachings of the cited prior art. Thus, the rejections under 35 U.S.C. § 103 should be withdrawn.

January 16, 2004

Reply to Office Action of October 16, 2003

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It is submitted that the claims are in condition for allowance. However, the Examiner is kindly invited to contact the undersigned to discuss any unresolved matters.

The Commissioner is hereby authorized to charge any fees associated with this response or credit any overpayment to Deposit Account No. 13-3402.

Respectfully submitted,


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